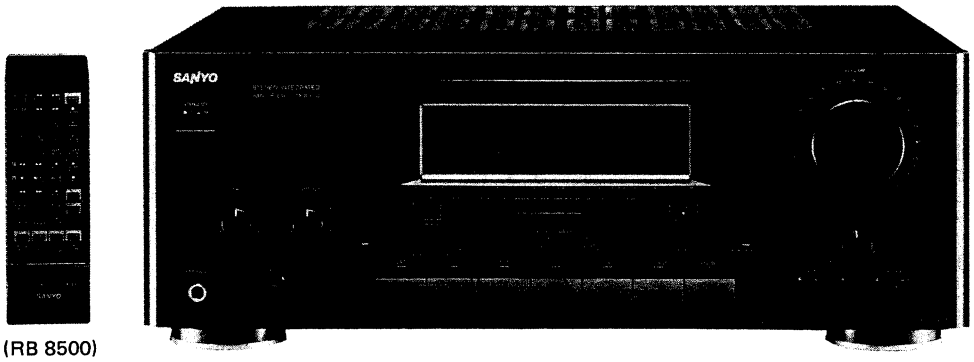
SANYO

Service Manual

Stereo Integrated Amplifier

JA8300 (EUROPE) (SPAIN) (WEST GERMANY)



(RB 8500)

Specifications

Note:
The below mentioned specifications are mainly based on the IHF measurements standard. They can therefore not directly be compared with specifications based on the DIN standard or other standards.

Continuous output power	55 W x 2 (at 8 ohms, 0.08% distortion)
Input sensitivity and impedance	PHONO: 2.5 mV/47 kohms TAPE PLAY/DAT PLAY/AUX/CD/ TUNER/VIDEO/ PROCESSOR IN: 150 mV/47 kohms
Output level	TAPE REC/DAT REC/PROCESSOR OUT: 150 mV
Frequency response	20 Hz – 35 kHz (CD)
Tone control response (VOLUME: –30 dB)	BASS: +/– 8 dB (at 100 Hz) TREBLE: +/– 8 dB (at 10 kHz)
Loudness control response (VOLUME: –30 dB)	+8 dB/+4 dB (100 Hz/10 kHz)
Signal to noise ratio	95 dB (CD)
Power requirements	AC: 220 V, 50 Hz
AC outlets (SWITCHED)	50 W max. x 3
Dimensions (W x D x H)	Approx. 420 x 375 x 155 mm

RB 8500 REMOTE CONTROLLER

Power requirements	DC: 3V, "AA/SUM-3/ R6" battery x 2
Dimensions (W x D x H)	Approx. 60 x 18 x 188 mm

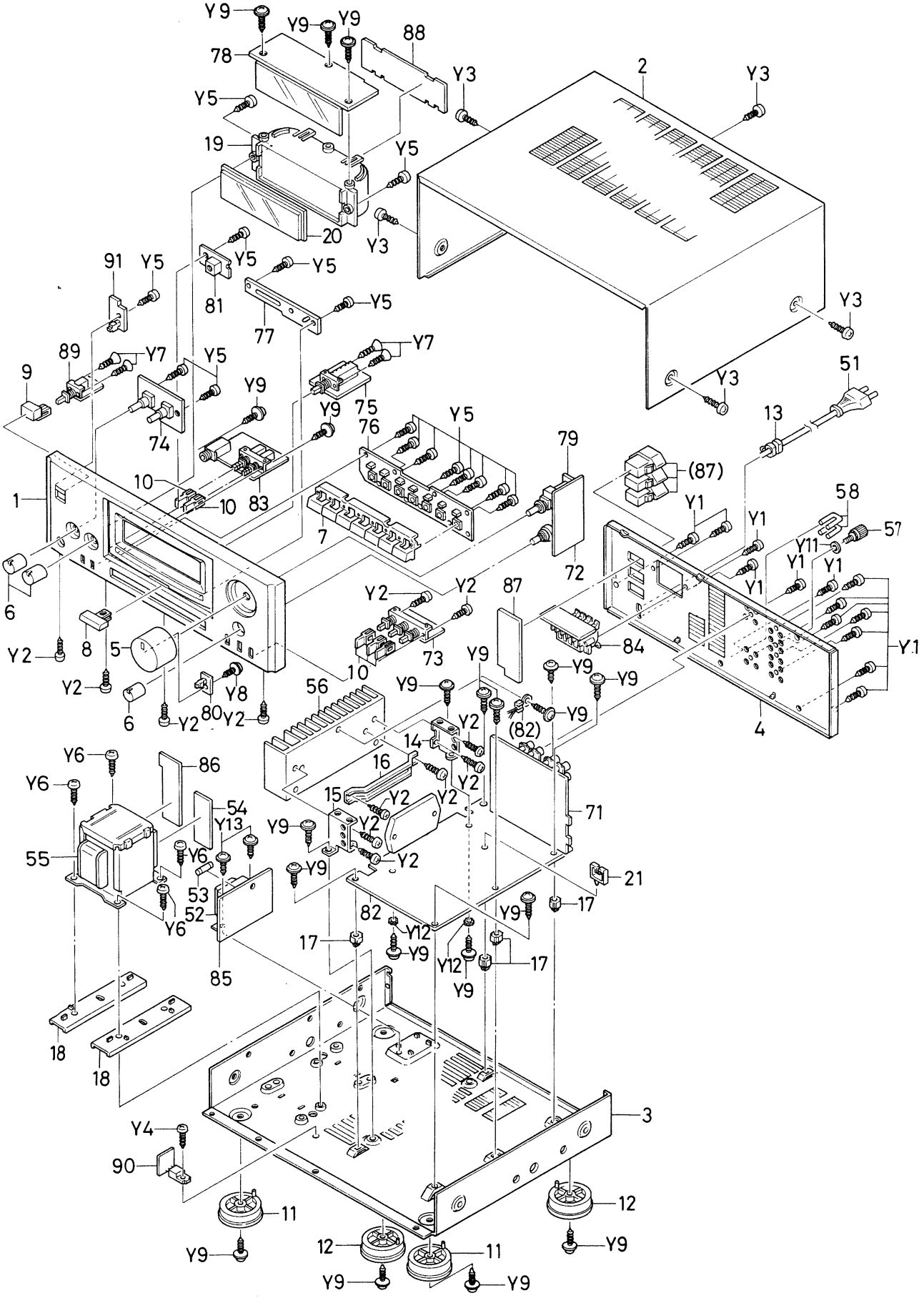
Specifications subject to change without notice.

Note:
The stand by (power) switch is mounted on the secondary side. The unit is not disconnected from AC-power, even when switched off.

PRODUCT CODE No.
129 321 00 (Europe)
129 321 01 (Spain)
129 321 02 (W. Germany)

REFERENCE No. WM-58022

EXPLODED VIEW



PARTS LIST

Ref. No.	Part No.	Description
	614 020 1222	SOCKET, 3P, POWER-AMP
	614 035 9275	SOCKET, 3P, W/LEAD, POWER-AMP
	614 020 1260	SOCKET, 7P, DIRECT SW
	614 035 4966	SOCKET, 7P, POWER-AMP
IC924	409 114 4803	IC LB1641
Q703	405 022 5604	TR 2SD1468-S
Q803	405 022 5604	TR 2SD1468-S
D900	407 050 3706	ZENER DIODE GZA4.7Y
D961	407 007 9904	DIODE GMA01
C962	403 057 3800	POLYESTER 0.1U M 50V

MUTING·LOUDNESS·MODE SWITCH P.C.B ASSY

Ref. No.	Part No.	Description
73	614 209 1197	ASSY, PCB, 3-SW
	614 208 4670	SWITCH, PUSH, MUTING·LOUDNESS·MODE
	614 035 4911	SOCKET, 2P, POWER-AMP (MUTE)
	614 020 1222	SOCKET, 3P, POWER-AMP
	614 035 9602	SOCKET, 3P, W/LEAD, POWER-AMP
	614 020 1260	SOCKET, 7P, DIRECT SW
	614 020 1260	SOCKET, 7P, TONE VR
C730	403 063 0008	POLYESTER 6800P K 50V
C731	403 060 8205	POLYESTER 0.033U K 50V
C830	403 063 0008	POLYESTER 6800P K 50V
C831	403 060 8205	POLYESTER 0.033U K 50V

BASS·TREBLE VR P.C.BOARD ASSY

Ref. No.	Part No.	Description
74	614 209 1203	ASSY, PCB, TONE VR
	614 208 4625	VR, ROTARY, BASS
	614 208 4632	VR, ROTARY, TREBLE
	614 020 1260	SOCKET, 7P, 3-SW
C740	403 058 3225	POLYESTER 0.015U K 50V
C741	403 002 3315	MT-COMPO 0.1U J 50V
C742	403 058 3225	POLYESTER 0.015U K 50V
C743	403 062 0306	POLYESTER 0.047U K 50V
C840	403 058 3225	POLYESTER 0.015U K 50V
C841	403 002 3315	MT-COMPO 0.1U J 50V
C842	403 058 3225	POLYESTER 0.015U K 50V
C843	403 062 0306	POLYESTER 0.047U K 50V

SOURCE DIRECT SWITCH P.C.BOARD ASSY

Ref. No.	Part No.	Description
75	614 210 1537	ASSY, PCB, DIRECT SW
	614 211 0317	SWITCH, PUSH, SOURCE DIRECT
	614 035 4911	SOCKET, 2P, MUTING LED
	614 017 4267	PLUG, 3P, POWER-AMP
	614 020 1260	SOCKET, 7P, VOLUME
	614 020 1260	SOCKET, 7P, 3-SW

FUNCTION SWITCH & LED P.C.BOARD ASSY

Ref. No.	Part No.	Description
76	614 209 1227	ASSY, PCB FUNCTION SW
	614 018 9056	SWITCH, DAT·CD·AUX·TAPE·TUNER·VIDEO·PHONO
	614 119 9399	SPACER, LED STAND (7 USED)
	614 035 4959	SOCKET, 6P, POWER-AMP
	614 035 4980	SOCKET, 9P, POWER-AMP
	614 036 3852	SOCKET, 9P, W/LEAD, POWER-AMP
Q961	405 004 5103	TR 2SA608-G-SPA
Q962	405 004 5103	TR 2SA608-G-SPA
Q963	405 004 5103	TR 2SA608-G-SPA
Q964	405 004 5103	TR 2SA608-G-SPA
Q965	405 004 5103	TR 2SA608-G-SPA
Q966	405 004 5103	TR 2SA608-G-SPA
Q967	405 004 5103	TR 2SA608-G-SPA
D971	407 038 4404	LED SLP-265B-50-B, PHONO
D972	407 038 4404	LED SLP-265B-50-B, VIDEO
D973	407 038 4404	LED SLP-265B-50-B, TUNER
D974	407 038 4404	LED SLP-265B-50-B, TAPE
D975	407 038 4404	LED SLP-265B-50-B, AUX
D976	407 038 4404	LED SLP-265B-50-B, CD
D977	407 038 4404	LED SLP-265B-50-B, DAT

MUTING LED & DIRECT SOURCE LAMP PCB ASSY

Ref. No.	Part No.	Description
77	614 209 4457	ASSY, PCB, MUTING LED
	408 008 9009	LED SLR-56VC70F130-M, MUTING-20DB
or	408 008 9108	LED SLR-56VC70F130-N, MUTING-20DB
or	408 008 9207	LED SLR-56VC70F130-P, MUTING-20DB
	614 045 9630	LAMP, DIRECT SOURCE
	614 035 4911	SOCKET, 2P, REGULATOR
	614 035 4911	SOCKET, 2P, DIRECT SW
	614 035 4928	SOCKET, 3P, POWER-AMP

LIQUID CRYSTAL DISPLAY P.C.BOARD ASSY

Ref. No.	Part No.	Description
78	614 211 2656	ASSY, PCB, LCD
	614 209 5980	LCD
	614 035 4959	SOCKET, 6P, POWER-AMP
IC970	409 088 6209	IC LC7582
D970	407 053 6704	ZENER DIODE MTZ5.6B

MOTOR P.C.BOARD ASSY

Ref. No.	Part No.	Description
79	614 209 1272	ASSY, PCB, VOLUME MOTOR
	614 035 4911	SOCKET, 2P, VOLUME
L901	614 027 6206	CHOKE COIL
C963	403 057 3503	POLYESTER 0.1U K 50V

VOLUME LED P.C.BOARD ASSY

Ref. No.	Part No.	Description
80	614 209 1289	ASSY, PCB, VOLUME LED
	614 119 9399	SPACER, LED STAND
D929	407 027 7904	LED SLP-154B-50, VOLUME ND.

INFRARED RAYS P.C.BOARD ASSY

Ref. No.	Part No.	Description
81	614 209 1296	ASSY, PCB, IR
	614 208 1198	OPTO CONNECTOR, IR RECEIVE
	614 035 4928	SOCKET, 3P, POWER-AMP

PARTS LIST

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.
Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

CAUTION : Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.

PACKING & ACCESSORIES

Ref. No.	Part No.	Description
	614 212 1078	INNER CARTON (SPAIN)
	614 212 1085	INNER CARTON (W·GERMANY)
	614 208 3451	INNER CARTON (EUROPE)
	614 207 3667	PAD, LEFT
	614 207 3674	PAD, RIGHT
	614 176 9684	INNER POLYE LAMINA COVER, SET
	614 176 2746	INNER POLYE COVER, ACCESSORY
	614 212 1122	INSTRUCTION MANUAL (SPAIN)
	614 212 1139	INSTRUCTION MANUAL (W·GERMANY)
	614 208 3475	INSTRUCTION MANUAL (EUROPE)
	614 186 2682	NOTICE, FTZ (W·GERMANY)
	149 508 00	REMOCON, RB 8500/SS
	614 036 7270	SOCKET, 4P, 700MM, TUNER
	614 036 7324	SOCKET, 5P, 700MM, DECK
	614 212 2099	SOCKET, 6P, 1000MM, CD
	614 106 4079	STAND, HIGHT CHANGE

CABINET & CHASSIS

Ref. No.	Part No.	Description
1	614 208 3154	ASSY, PANEL, FRONT (EUROPE·SPAIN)
2	614 213 4115	CABINET ASSY
3	614 207 3353	CABINET, BOTTOM
4	614 212 1214	BACK PANEL (SPAIN)
	614 212 1221	BACK PANEL (W·GERMANY)
	614 208 3512	BACK PANEL (EUROPE)
5	614 207 3438	KNOB, ROTARY, VOLUME
6	614 207 3421	KNOB, ROTARY, BASS·TREBLE·BALANCE
7	614 207 3476	BUTTON, FUNCTION
8	614 207 3469	BUTTON, SOURCE DIRECT
9	614 207 3445	BUTTON, STAND-BY
10	614 207 3452	BUTTON, SPEAKER A/B·LOUDNESS·MODE·MUTING
11	614 210 3968	ASSY, FOOT, FRONT
12	614 210 3975	ASSY, FOOT, REAR
13	⚠ 614 129 1901	FIXER, AC CORD
14	614 114 5211	BRACKET, HEAT SINK, RIGHT
15	614 114 5273	BRACKET, HEAT SINK, LEFT
16	614 114 8410	BRACKET, IC FIXING
17	614 107 2791	BRACKET, PCB STAND
18	614 116 1198	REINFORCEMENT, P.T
19	614 207 3599	REFLECTOR, LCD
20	614 207 3582	FILTER, LCD
21	614 208 3208	SHIELD, LCD
22	614 213 4054	INSULATOR, SP TERMINAL
23	614 129 3509	FIXER, LEAD RETAINER
24	614 129 9181	LUG, LEAD RETAINER

FIXING PARTS

Ref. No.	Part No.	Description
Y1	412 004 2902	SPECIAL SCREW
Y2	411 021 6405	SCR S-TPG BIN 3X8
Y3	411 021 6603	SCR S-TPG BIN 3X8
Y4	411 027 3101	SCR S-TPG BIN 3X8
Y5	411 021 3503	SCR S-TPG BIN 3X10
Y6	411 001 4209	SCR S-TPG BIN 4X8
Y7	411 022 4608	SCR S-TPG FLT 3X8
Y8	411 024 3807	SCR S-TPG PAN + FLG 2X8
Y9	411 020 9902	SCR S-TPG BRZ + FLG 3X8
Y10	411 105 9704	WASHER Z 3X10X1
Y11	411 008 0402	WASHER OUT TW 3
Y12	411 021 5101	SCR S-TPG BIN 3X4
Y13	411 020 9803	SCR S-TPG BRZ+FLG 3X6

ELECTRICAL PARTS

Ref. No.	Part No.	Description
51	⚠ 614 023 3100	POWER CORD
or	⚠ 614 203 0493	POWER CORD
52	⚠ 614 208 4595	POWER TRANSFORMER, SUB
53	⚠ 423 005 3508	FUSE, 250V, 1.6A, F901
54	⚠ 614 209 4549	PCB, P.T PRIMARY
55	⚠ 614 208 4601	POWER TRANSFORMER, MAIN
56	614 209 6130	HEAT SINK, FOR IC901
57	614 211 0287	TERMINAL, PHONO GND
58	614 017 4243	PLUG, SHORT BAR

PRE-AMPLIFIER P.C.BOARD ASSY

Ref. No.	Part No.	Description
71	614 212 8497	ASSY, PCB, PRE-AMP & PIN <RCA> (W·GERMANY)
	614 209 4440	ASSY, PCB, PRE-AMP & PIN <RCA> (EUROPE·SPAIN)
	614 208 4502	JACK, 4P, PHOTO·TAPE-REC
	614 208 4533	JACK, 6P, TAPE-PLAY·DAT-REC/PLAY
	614 208 4519	JACK, 4P, AUX·CD
	614 208 4519	JACK, 4P, TUNER·VIDEO
	614 208 4519	JACK, 4P, PROCESSOR-IN/OUT
	614 016 8303	PLUG, 11P, POWER-AMP
IC920	409 109 5105	IC LC7821
IC922	409 018 4503	IC LA6458DS
IC923	409 018 4503	IC LA6458DS
IC925	409 018 4503	IC LA6458DS
Q702	405 022 5604	TR 2SD1468-S
Q802	405 022 5604	TR 2SD1468-S
C725	403 086 2607	NP-ELECT 1U M 50V
C825	403 086 2607	NP-ELECT 1U M 50V

VOLUME·BALANCE VR P.C.BOARD ASSY

Ref. No.	Part No.	Description
72	⚠ 614 209 1180	ASSY, PCB, MAIN VR
	614 208 4618	VR, ROTARY, VOLUME
	614 208 4649	VR, ROTARY, BALANCE
	614 035 4911	SOCKET, 2P, MOTOR

PARTS LIST

Ref. No.	Part No.	Description
	⚠ 614 211 7606	RELAY,POWER
	614 035 4911	SOCKET, 2P, POWER-AMP
	614 035 4928	SOCKET, 3P, STAND-BY SW
D910	⚠ 407 004 9105	DIODE DSF10C
D911	⚠ 407 004 9105	DIODE DSF10C
D912	⚠ 407 004 9105	DIODE DSF10C
D913	⚠ 407 004 9105	DIODE DSF10C
D916	407 005 4505	DIODE DS442X
C901	⚠ 404 000 1607	CERAMIC 0.01U F 400V
or	⚠ 404 033 3302	CERAMIC 0.01U M -
or	⚠ 404 033 3401	CERAMIC 0.01U Z -
C902	403 069 8404	CERAMIC 0.01U Z 50V
C990	403 047 5005	ELECT 470U M 25V
R908	401 059 6706	OXIDE-MT 180 JA 1W

P.T SECONDARY P.C.BOARD ASSY

Ref. No.	Part No.	Description
86	⚠ 614 209 4488	ASSY, PCB, P.T SECONDARY
	614 020 1246	SOCKET, 5P, POWER-AMP
R901	⚠ 401 057 4100	OXIDE-MT 0.33 JA 1W
R902	⚠ 401 057 4100	OXIDE-MT 0.33 JA 1W

AC OUTLET P.C.BOARD ASSY

Ref. No.	Part No.	Description
87	⚠ 614 209 1357	ASSY, PCB, AC OUTLET
	⚠ 614 035 4645	SOCKET, AC OUTLET

LCD LAMP P.C.BOARD ASSY

Ref. No.	Part No.	Description
88	614 209 1364	ASSY, PCB, LCD LAMP
	614 045 9647	LAMP, 12V 100MA, LCD
	614 035 4911	SOCKET, 2P, REGULATOR
R900	401 061 0709	OXIDE-MT 3.9 JA 1W

STAND-BY SWITCH P.C.BOARD ASSY

Ref. No.	Part No.	Description
89	614 209 1371	ASSY, PCB, STAND-BY SW
	614 019 0663	SWITCH, STAND-BY
	614 035 4911	SOCKET, 2P, STAND-BY LED
	614 035 4928	SOCKET, 3P, SUB P.T
	614 035 4935	SOCKET, 4P, POWER-AMP
Q980	405 018 0101	TR 2SC3331-T

REGULATOR P.C.BOARD ASSY

Ref. No.	Part No.	Description
90	614 212 1337	ASSY, PCB, REGULATOR
	614 020 6548	SOCKET, 2P, LCD LAMP・POWER-AMP
	614 035 5932	SOCKET, 2P, DIRECT LAMP
IC907	⚠ 409 057 8203	IC UPC7912H

STAND-BY LED P.C.BOARD ASSY

Ref. No.	Part No.	Description
91	614 212 1344	ASSY, PCB, STAND-BY LED
	614 035 4911	SOCKET, 2P, STAND-BY SW

Ref. No.	Part No.	Description
	614 119 9399	SPACER, LED STAND
D990	407 037 3101	LED SLP-165B-50-B, STAND-BY

PARTS LIST

POWER AMPLIFITER P.C.BOARD ASSY

Ref. No.	Part No.	Description
82	614 209 4464	ASSY, PCB, POWER AMP (EUROPE・
	614 213 9820	ASSY, PCB, POWER AMP SPAIN) (W.GERMANY)
	614 016 8235	PLUG, 4P, TUNER
	614 016 8242	PLUG, 5P, DECK・DAT
	614 016 8259	PLUG, 6P, CD
	614 035 5932	SOCKET, 2P (V), 3-SW
	614 020 6548	SOCKET, 2P, SUB-P.T・REGULATOR
	614 035 5949	SOCKET, 3P (V), MUTING LED・IR
	614 020 1222	SOCKET, 3P, DIRECT SW
	614 035 9602	SOCKET, 3P, W/LEAD, DIRECT SW
	614 035 4935	SOCKET, 4P, STAND-BY SW
	614 020 1239	SOCKET, 4P, SP SW
	614 020 1246	SOCKET, 5P, P.T SECONDART
	614 035 5970	SOCKET, 6P (V), FUNCTION SW・LCD
	614 035 5987	SOCKET, 7P (V), VOLUME
	614 035 8858	SOCKET, 11P, PRE-AMP
	614 017 4267	PLUG, 3P, VOLUME (MAIN-IN)
	614 017 4328	PLUG, 9P, FUNCTION LED
	614 012 8482	RELAY, 24V, SPEAKER
or	614 012 8758	RELAY, 24V, SPEAKER
or	614 211 7613	RELAY, 24V, SPEAKER
	614 002 5606	POZISTOR, 110° C
L701	614 034 8958	VHF COIL
L801	614 034 8958	VHF COIL
L901	614 027 6206	CHOCK COIL
X901	614 035 1613	CERAMIC RESONATOR, 4MHZ
RA901	614 209 3689	RESISTOR, 10K OHM X8
IC901	⚠ 409 185 2906	IC STK4194MK5
IC902	⚠ 409 113 9304	IC LM7815CT
or	⚠ 409 040 1006	IC NJM7815A
IC903	⚠ 409 066 5903	IC NJM7915A
IC906	⚠ 409 027 1609	IC L7812
IC930	410 069 1908	IC HD614042SJ83
IC931	409 003 0404	IC BA6138
IC932	409 008 7705	IC HA17393
Q701	405 022 5604	TR 2SD1468-S
Q801	405 022 5604	TR 2SD1468-S
Q901	405 004 5004	TR 2SA608-G-NP
Q910	405 023 5306	TR 2SD400-F-MP
Q911	405 018 0101	TR 2SC3331-T
Q912	405 018 0101	TR 2SC3331-T
Q913	405 018 0101	TR 2SC3331-T
Q914	405 018 0101	TR 2SC3331-T
Q915	405 018 0101	TR 2SC3331-T
Q917	405 018 0101	TR 2SC3331-T
Q918	405 018 0101	TR 2SC3331-T
Q924	405 018 0101	TR 2SC3331-T
Q925	405 018 0101	TR 2SC3331-T
D901	⚠ 407 003 7904	DIODE DBA40C-K15
D902	⚠ 407 088 6403	DIODE GP15D-L
D903	⚠ 407 088 6403	DIODE GP15D-L
D904	⚠ 407 088 6403	DIODE GP15D-L
D905	⚠ 407 088 6403	DIODE GP15D-L
D915	407 005 4505	DIODE DS442X
D917	⚠ 407 007 9904	DIODE GMA01
D918	407 005 4505	DIODE DS442X
D919	407 005 4505	DIODE DS442X
D930	407 053 7206	ZENER DIODE MTZ6.2C
D932	407 053 6704	ZENER DIODE MTZ5.6B
D933	407 007 9904	DIODE GMA01
D934	407 007 9904	DIODE GMA01
D935	407 007 9904	DIODE GMA01
D936	407 005 4505	DIODE DS442X
D937	407 049 9009	ZENER DIODE GZA2.4Z
D940	407 007 9904	DIODE GMA01
D941	407 005 4505	DIODE DS442X
D942	407 005 4505	DIODE DS442X
D943	407 007 9904	DIODE GMA01
D963	407 049 9009	ZENER DIODE GZA2.4Z

Ref. No.	Part No.	Description
C705	403 062 1105	POLYESTER 0.047U M 50V
C706	403 057 3800	POLYESTER 0.1U M 50V
C707	403 057 3800	POLYESTER 0.1U M 50V
C804	403 113 9005	CERAMIC 3P K 50V
C805	403 062 1105	POLYESTER 0.047U M 50V
C806	403 057 3800	POLYESTER 0.1U M 50V
C807	403 057 3800	POLYESTER 0.1U M 50V
C830	403 041 8804	ELECT 10U M 16V
C903	⚠ 404 001 6809	ELECT 4700U M 50V
C904	⚠ 404 001 6809	ELECT 4700U M 50V
C909	403 057 3800	POLYESTER 0.1U M 50V
C910	403 057 3800	POLYESTER 0.1U M 50V
C934	403 085 6804	NP-ELECT 47U M 16V
C964	403 057 3800	POLYESTER 0.1U M 50V
C978	403 039 0902	ELECT 3300U M 6.3V
R701	401 041 1702	MT-FILM 1K FD 1/4W
R703	401 049 7003	MT-FILM 560 FD 1/4W
R704	401 049 8109	MT-FILM 56K FD 1/4W
R705	401 006 9002	CARBON 10 JB 1/2W
R706	401 010 5601	CARBON 5.6 JB 1/2W
R801	401 041 1702	MT-FILM 1K FD 1/4W
R803	401 049 7003	MT-FILM 560 FD 1/4W
R804	401 049 8109	MT-FILM 56K FD 1/4W
R805	401 006 9002	CARBON 10 JB 1/2W
R806	401 010 5601	CARBON 5.6 JB 1/2W
R912	⚠ 402 023 1703	FUSIBLE RES 100 J- 1/4W
R913	⚠ 402 023 1703	FUSIBLE RES 100 J- 1/4W
R940	⚠ 402 023 1703	FUSIBLE RES 100 J- 1/4W

SPEAKER SWITCH & PHONES SOCKET PCB ASSY

Ref. No.	Part No.	Description
83	614 212 8510	ASSY, PCB, SP SW (W・GERMANY)
	614 209 4471	ASSY, PCB, SP SW (EUROPE・SPAIN)
	614 212 6905	SOCKET, PHONES
	614 208 4687	SWITCH, PUSH, SPEAKER-A/B
	614 020 1239	SOCKET, 4P, POWER-AMP
	614 020 1253	SOCKET, 6P, SP TERMINAL
R707	401 061 6404	OXIDE-MT 390 JA 1W
R807	401 061 6404	OXIDE-MT 390 JA 1W

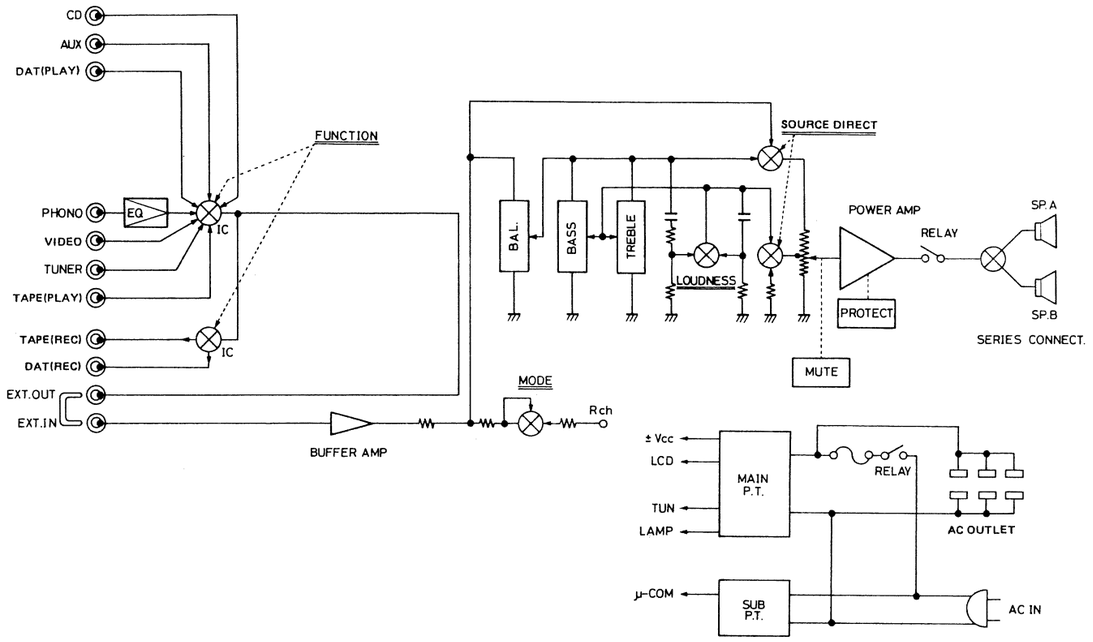
SPEAKER TERMINAL P.C.BOARD ASSY

Ref. No.	Part No.	Description
84	614 212 8527	ASSY, PCB, SP TERMINAL (W・GERMANY)
	614 209 1326	ASSY, PCB, SP TERMINAL (EUROPE・SPAIN)
	614 017 8401	TERMINAL BOARD, 8P, SPEAKER (W・GERMANY)
	614 017 8371	TERMINAL BOARD, 8P, SPEAKER (EUROPE・SPAIN)
	614 020 1253	SOCKET, 6P, SP SW
C50	403 057 1202	POLYESTER 0.01U M 50V (W・GERMANY)
C51	403 057 1202	POLYESTER 0.01U M 50V (W・GERMANY)
C52	403 062 5905	POLYESTER 5600P M 50V (W・GERMANY)
C53	403 062 5905	POLYESTER 5600P M 50V (W・GERMANY)

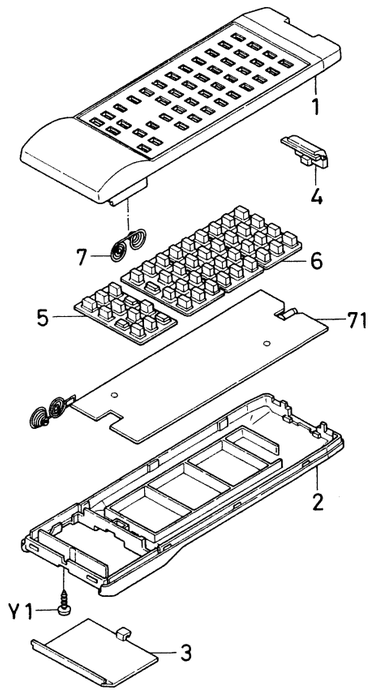
SUB P.T P.C.BOARD ASSY

Ref. No.	Part No.	Description
85	⚠ 614 212 1320	ASSY, PCB, SUB P.T
	⚠ 614 123 2089	TERMINAL, AC-IN
	⚠ 614 123 0023	BRACKET FUSE, FOR F901
	⚠ 614 012 8857	RELAY, POWER

BLOCK DIAGRAM



EXPLODED VIEW & PARTS LIST (REMOTE CONTROLLER)



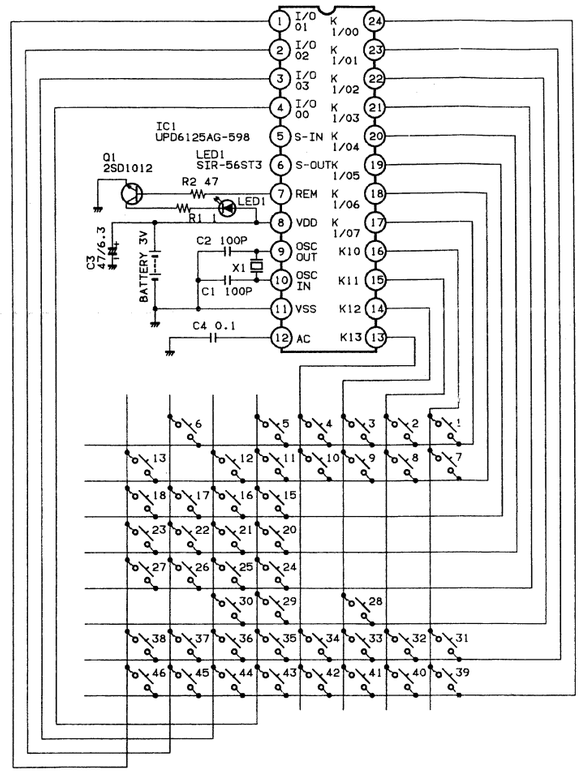
CABINET & CHASSIS

Ref. No.	Part No.	Description
1	614 213 5334	ASSY, CABINET, TOP
2	614 213 5358	CABINET, BOTTOM
3	614 213 5365	LID, BATTERY
4	614 213 5389	WINDOW, IR TRANSMIT
5	614 213 5402	BUTTON, SMALL
6	614 213 5396	BUTTON, LARGE
7	614 213 5631	SPRING, BATTERY TERMINAL (+-)
Y1	411 022 7906	SCR TPG PAN 2X6

REMOCON (TRANSMIT) P.C.BOARD ASSY

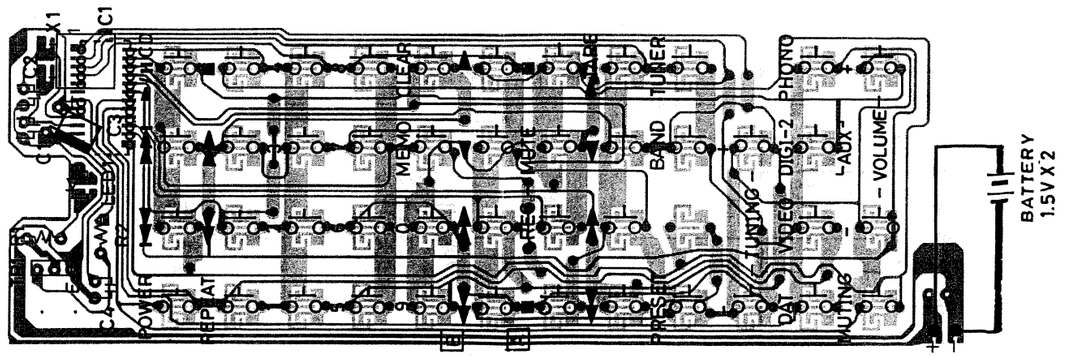
Ref. No.	Part No.	Description
71	614 213 5303	ASSY, PCB, REMOCON
	614 213 5419	SPRING, COIL, BATTERY TERMINAL (+)
	614 213 5426	SPRING, COIL, BATTERY TERMINAL (-)
X1	614 213 5327	SERAMIC RESONATOR, CSB455E
IC1	410 070 4608	IC UPD6125AG-598
Q1	405 021 0907	TR 2SD1012H-SPA
LED1	408 010 4207	LED SIR-56ST3

SCHEMATIC DIAGRAM (REMOTE CONTROLLER)

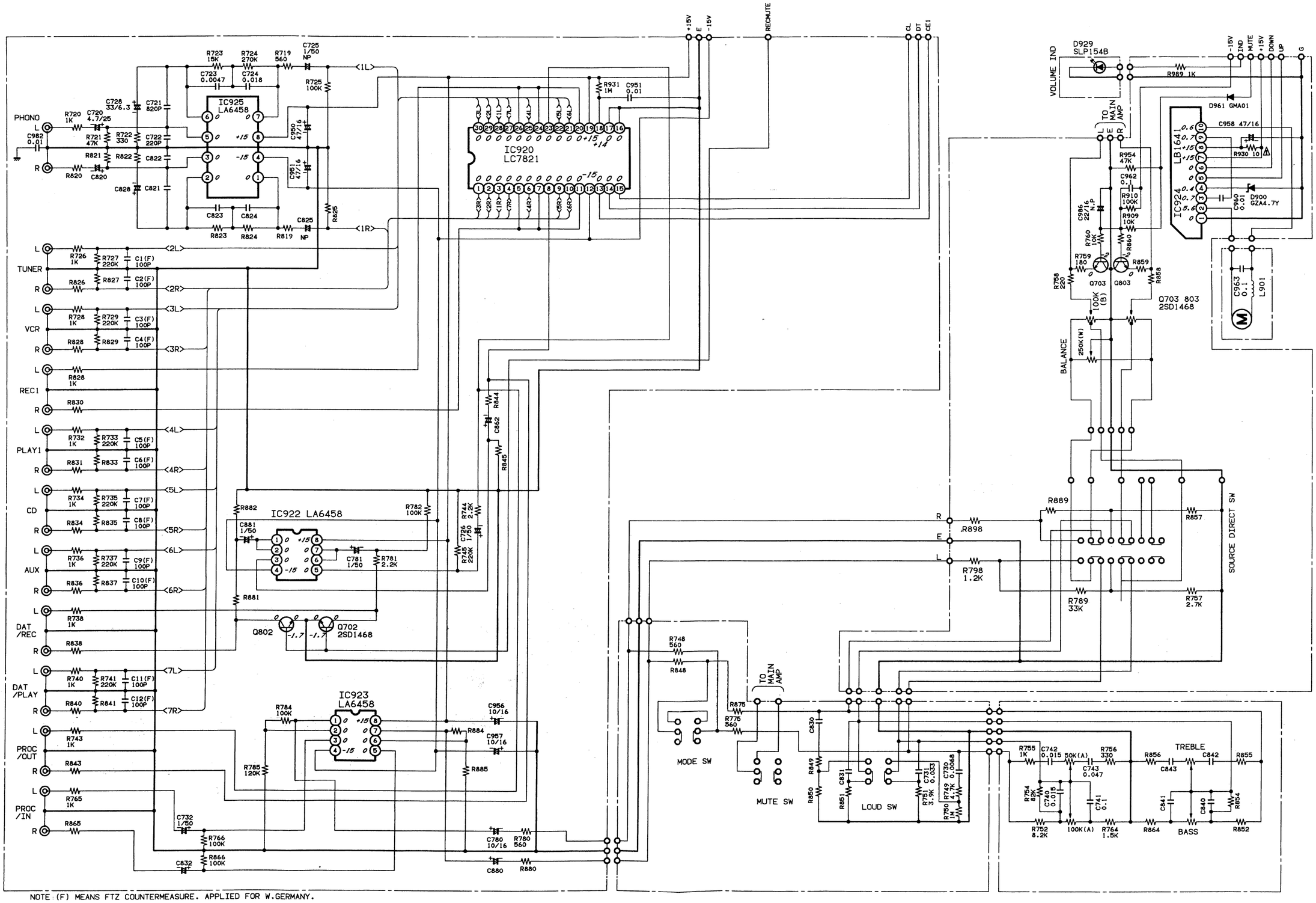


KEY NO	FUNCTION	KEY NO	FUNCTION
1	VIDEO	24	◁ (TAPE A)
2	DIGI-2 AUX	25	□ (TAPE A)
3	PHONO	26	▷ (TAPE A)
4	DAT	27	▷▷ (TAPE A)
5	BAND	28	CLEAR (CD)
6	TUNER	29	9 (CD)
7	POWER	30	0 (CD)
8	VOL+	31	MEMO (CD)
9	VOL-	32	▷/II (CD)
10	MUTING	33	▷▷I (CD)
11	TUN+	34	I◁◁ (CD)
12	TUN-	35	5 (CD)
13	PRESET	36	6 (CD)
14		37	7 (CD)
15	▷▷ (TAPE B)	38	8 (CD)
16	◁◁ (TAPE B)	39	REPEAT (CD)
17	○ REC-(TAPE B)	40	◁◁ (CD)
18	◁ (TAPE B)	41	▷▷ (CD)
19		42	□ (CD)
20	◁◁ (TAPE A)	43	1 (CD)
21	□ (TAPE B)	44	2 (CD)
22	-MUTE(TAPE B)	45	3 (CD)
23	▷ (TAPE B)	46	4 (CD)

WIRING DIAGRAM (REMOTE CONTROLLER)

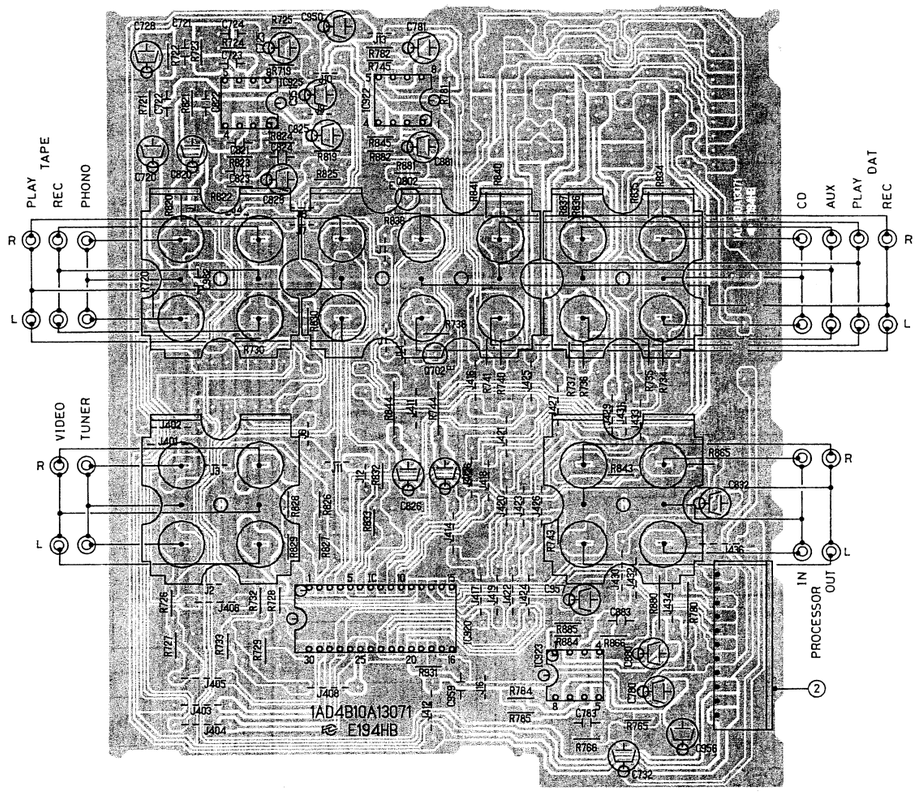


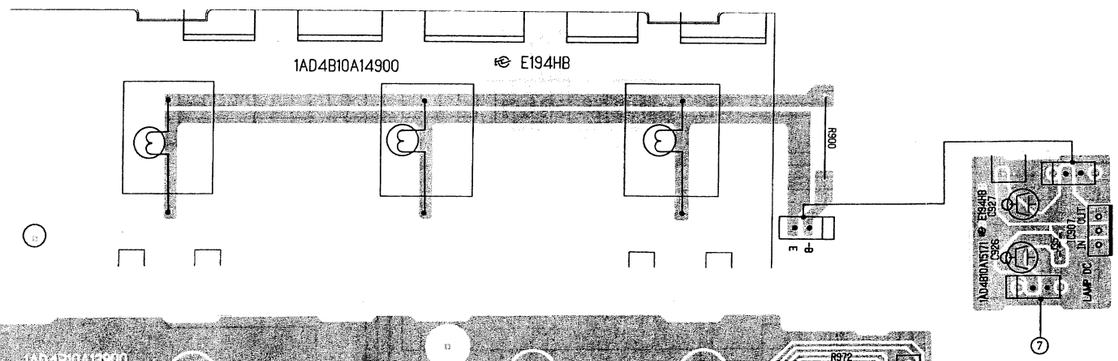
SCHEMATIC DIAGRAM (PRE-AMPLIFIER)

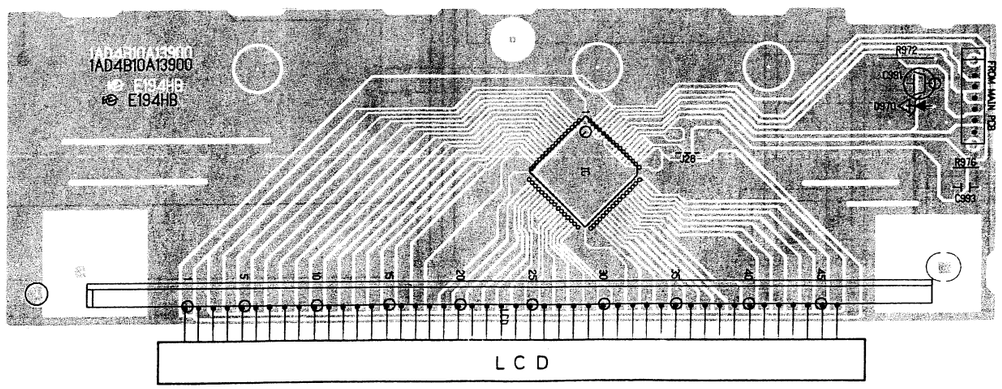


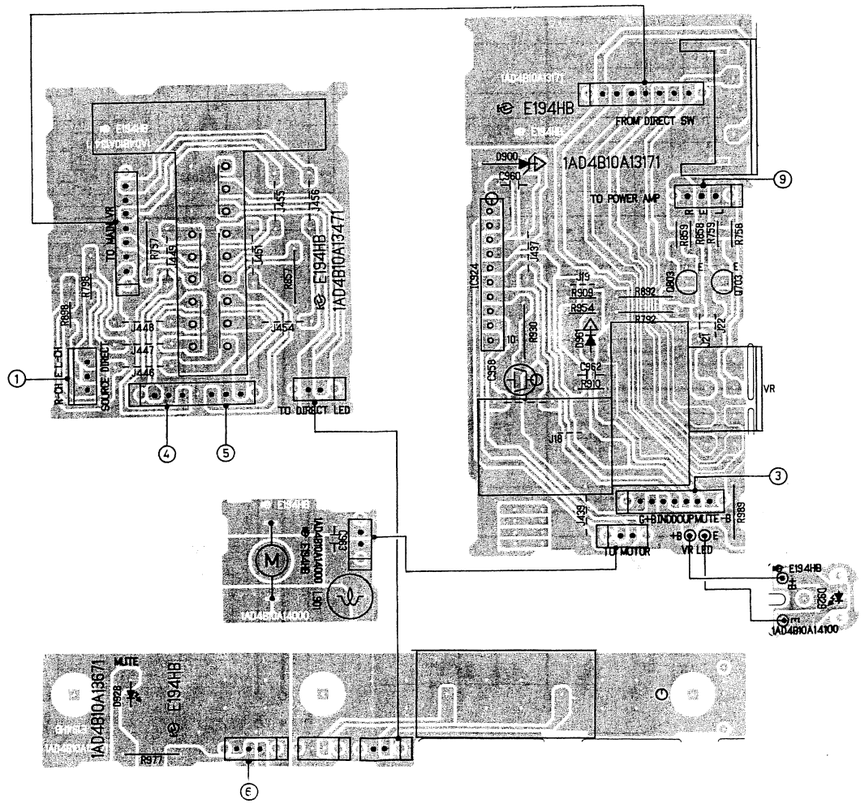
NOTE : (F) MEANS FTZ COUNTERMEASURE. APPLIED FOR W.GERMANY.

WIRING DIAGRAM

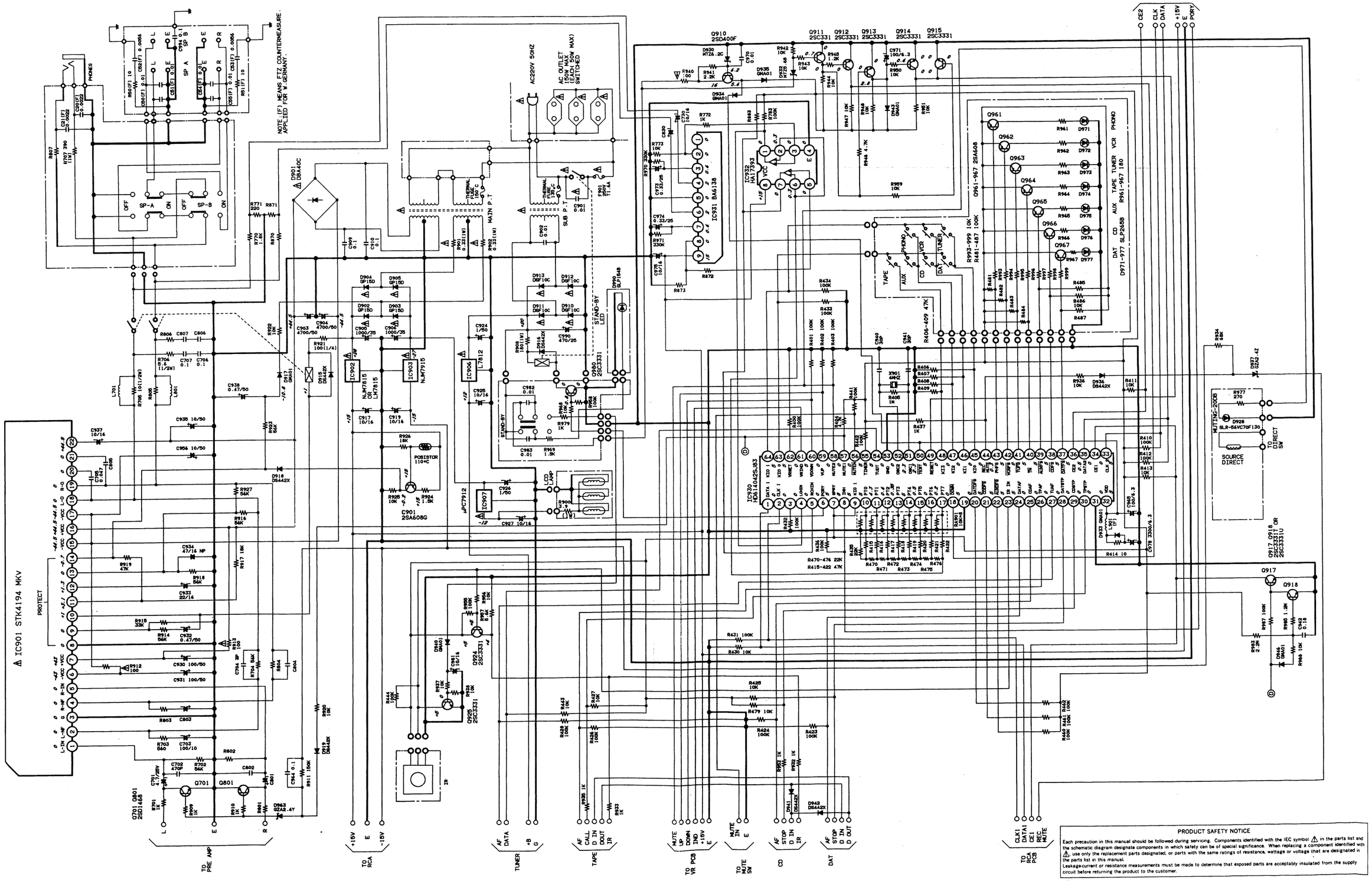








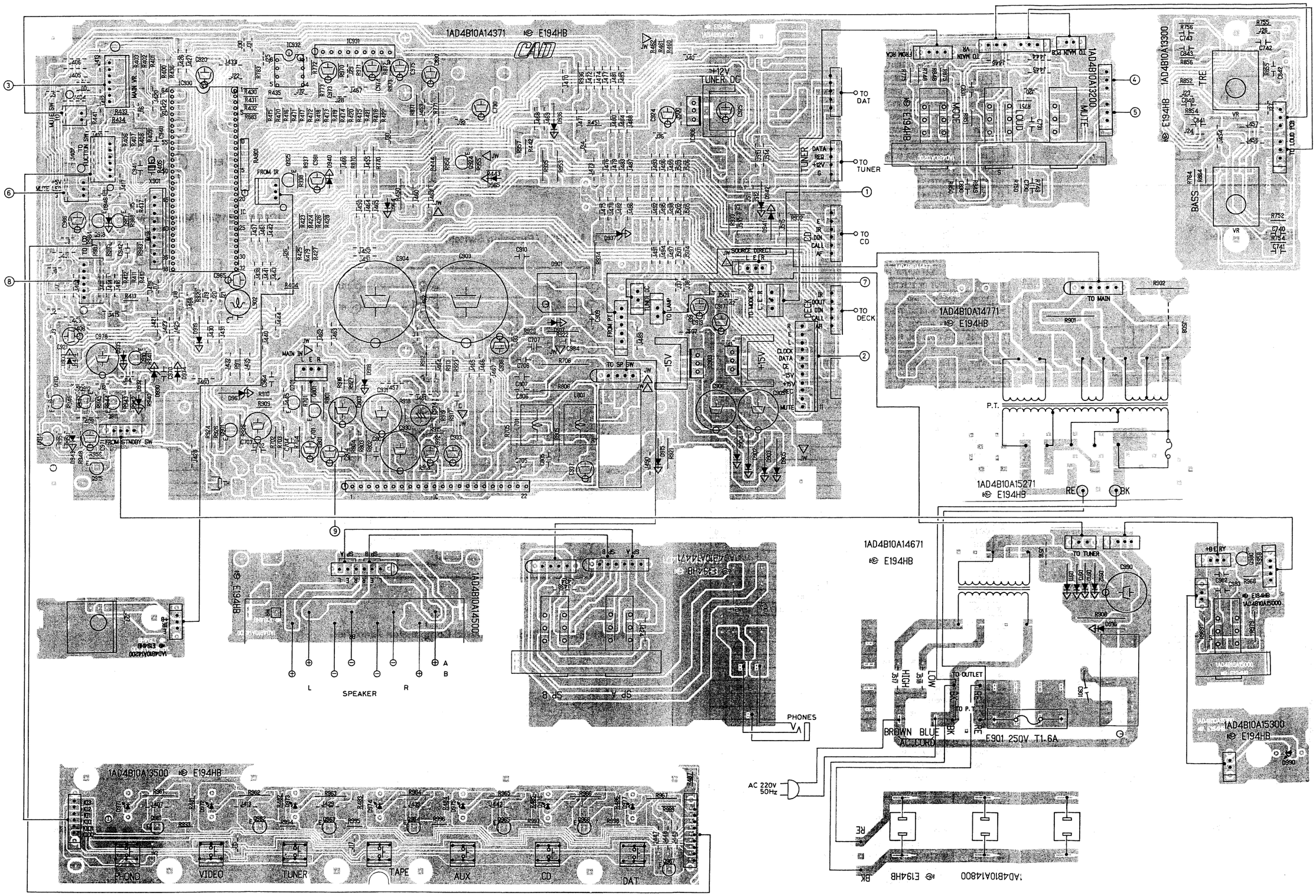
SCHEMATIC DIAGRAM (MAIN-AMPLIFIER)



PRODUCT SAFETY NOTICE

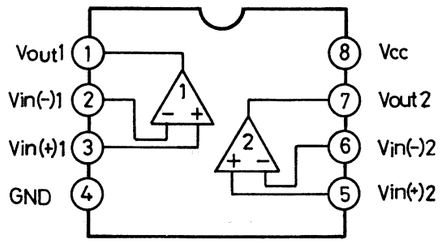
Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.
Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

WIRING DIAGRAM

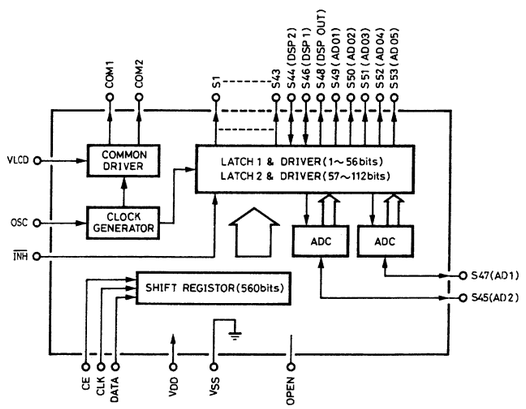


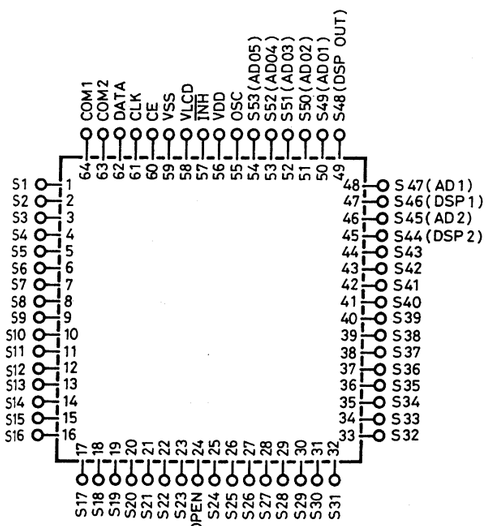
IC BLOCK DIAGRAM

IC932 HA17393 (Dual Operational Amplitier)



IC970 LC7582 (LCD Driver)





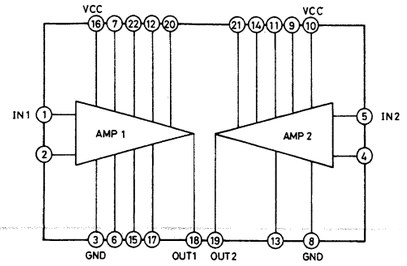
IC930 HD614042SJ83 (Micro Processor)

Pin Name & Functions

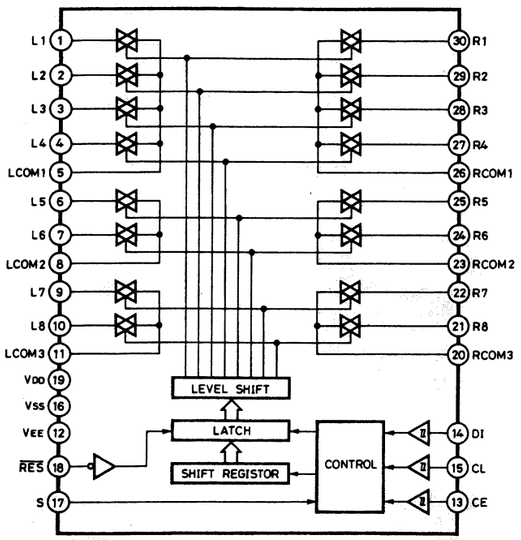
No	NAME	FUNCTION	ACTIVE	IO
01	DATA1	DATA FOR LC7821(FUNCTION IC)	HIGH	O
02	CLK1	CLOCK FOR LC7821(FUNCTION IC)	HIGH	O
03	INIDSP	SET INITIAL DISPLY FOR LCD POWOR ON	LOW	I
04	LCHIN	COMPARATOR INPUT OF AUDIO SIGNAL(L-CH)		I
05	RCHIN	COMPARATOR INPUT OF AUDIO SIGNAL(R-CH)		I
06	PORY	OUTPUT FOR POWER RELAY ON/OFF	HIGH	O
07	SPRY	OUTPUT FOR SPEAKER RELAY ON/OFF	HIGH	O
08	INH	INHIBIT FOR LC7582(LCD IC)	LOW	O
09	OPEN	CONNECT VCC		
10	PT0	PATTERN OUTPUT FOR A/D CONVERTION	HIGH	O
11	PT1	PATTERN OUTPUT FOR A/D CONVERTION	HIGH	O
12	PT2	PATTERN OUTPUT FOR A/D CONVERTION	HIGH	O
13	PT3	PATTERN OUTPUT FOR A/D CONVERTION	HIGH	O
14	PT4	PATTERN OUTPUT FOR A/D CONVERTION	HIGH	O
15	PT5	PATTERN OUTPUT FOR A/D CONVERTION	HIGH	O
16	PT6	PATTERN OUTPUT FOR A/D CONVERTION	HIGH	O
17	PT7	PATTERN OUTPUT FOR A/D CONVERTION	HIGH	O
18	DPWN	INPUT OF ELECTRICITY FAILURE DETECTION	LOW	I
19	Vdisp	CONNECT GND		
20	DATDFS	SET DIGITAL FUNCTION(DAT)	LOW	O
21	CDDFS	SET DIGITAL FUNCTION(CD)	LOW	O
22	AUXDFS	SET DIGITAL FUNCTION(AUX)	LOW	O
23	IRIN	INPUT FOR REMOCON & SET INITIAL STAND-BY	L&H	I
24	DATAF	INPUT FOR AUTO FUNCTION SIGNAL FROM DAT	HIGH	I
25	CDAF	INPUT FOR AUTO FUNCTION SIGNAL FROM CD	HIGH	I
26	TPAF	INPUT FOR AUTO FUNCTION SIGNAL FROM DECK	HIGH	I
27	TUAF	INPUT FOR AUTO FUNCTION SIGNAL FROM TUNER	HIGH	I
28	DATSTP	SEND START/STOP PULSE TO DAT	HIGH	O
29	CDSTP	SEND START/STOP PULSE TO CD	HIGH	O
30	TPSTP	SEND START/STOP PULSE TO DECK	HIGH	O
31	OPEN	CONNECT GND		
32	VCC	POWER SOURCE		
33	CLK2	CLOCK FOR LC7852(LCD IC)	HIGH	O
34	CE1	CE FOR LC7821(FUNCTION IC)	HIGH	O
35	DATA2	DATA FOR LC7582(LCD IC)	HIGH	O
36	CE2	CE FOR LC7582(LCD IC)	HIGH	O
37	DATFS	LED DRIVER OF FUNCTION SET DISPLAY(DAT)	LOW	O
38	CDFS	LED DRIVER OF FUNCTION SET DISPLAY(CD)	LOW	O
39	AUXFS	LED DRIVER OF FUNCTION SET DISPLAY(AUX)	LOW	O
40	TM	LED DRIVER OF TAPE MONITOR SET DISPLAY(DECK)	LOW	O
41	TUFS	LED DRIVER OF FUNCTION SET DISPLAY(TUNER)	LOW	O
42	VCRFS	LED DRIVER OF FUNCTION SET DISPLAY(VCR)	LOW	O
43	PHFS	LED DRIVER OF FUNCTION SET DISPLAY(TURN TABLE)	LOW	O
44	DATREC	REC MUTE FOR DAT FUNCTION	HIGH	O
45	KI0	INPUT FROM KEY MATRIX	HIGH	I
46	KI1	INPUT FROM KEY MATRIX	HIGH	I
47	KI2	INPUT FROM KEY MATRIX	HIGH	I
48	KI3	INPUT FROM KEY MATRIX	HIGH	I
49	RESET	RESET	HIGH	I
50	TEST	CONNECT VCC		I
51	OSC1	OSCILLATOR		I
52	OSC2	OSCILLATOR		O
53	GND	GND		
54	TUDT	SEND DATA TO TUNER	HIGH	O
55	TIMER	POWER ON/OFF CONTROL FROM TUNER TIMER(OFF=LOW)		I
56	MUTEIN	SET -20dB MUTING		I
57	MUTE1	-∞dB MUTING	HIGH	O
58	MUTE2	-20dB MUTING	HIGH	O
59	VUP	UP SIGNAL TO VOLUME	HIGH	O
60	VDOWN	DOWN SIGNAL TO VOLUME	HIGH	O
61	VRIND	POWER ON LED DRIVER(VOLUME OPERATION = FLASHING)	HIGH	O
62	TPSTP	INITIAL SET FOR VOLUME OPERATION	HIGH	I
63	K100	OUTPUT TO KEY MATRIX	LOW	O
64	K101	OUTPUT TO KEY MATRIX	LOW	O

IC BLOCK DIAGRAM

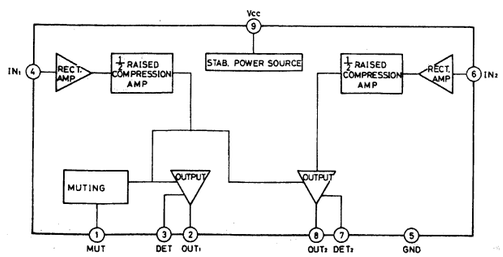
IC901 STK4194MK5 (2-ch AF Power Amplifier)



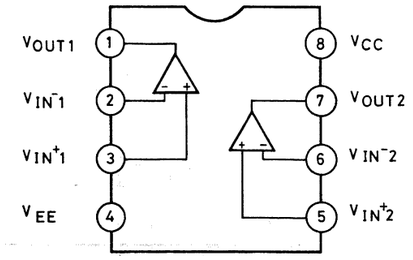
IC920 LC7821 (Function Switch)



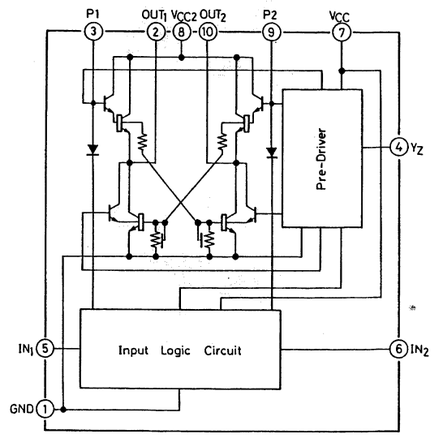
IC931 BA6138 (2-ch 1/2 Raised Compression Amplifier)



IC922, 923, 925 LA6458DS (Dual Operational Amplifier)



IC924 LB1641 (Motor Driver)



Input		Output		Action
IN_1	IN_2	OUT_1	OUT_2	
0	0	0	0	Brake
1	0	1	0	Normal(Reverse)Rotary
0	1	0	1	Reverse(Normal)Rotary
1	1	0	0	Brake

Rechnungs-Nr.: 402665 / 008
Art.-Nr.: S M JA-8300
S M

Lagerort: KSO 11 AO 2

Menge : 1

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Osaka, Japan